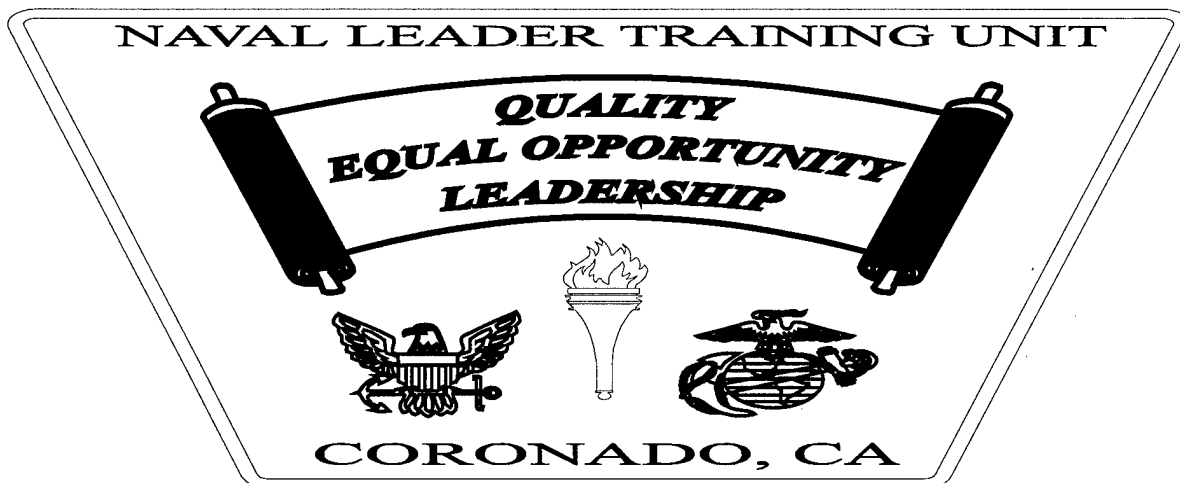


Running Head: CURRICULUM INFLUENCE OF THE NAVY INTERMEDIATE OFFICER
LEADERSHIP TRAINING COURSE



Curriculum Influence of the Navy Intermediate Officer Leadership Training Course

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Chapter 1

The Problem

Introduction and Background

In its ongoing effort to produce well-rounded leaders, the United States Navy requires both its enlisted and officer members to attend leadership courses at specified career milestones. Officers, for example, attend the Intermediate Officer Leadership Training Course (IOLTC) at the department head or mid-career point. This course supports the Navy's mission to "be organized, trained, and equipped primarily for prompt and sustained combat incident to operations at sea" by providing the leadership skills necessary to carry out this mission (Dalton, 1994). The course provides leadership training in the areas of values, leadership, communication, subordinate development, managing systems and processes, command development, and mission execution. The course mission is to provide advanced education and training in the concepts, philosophies, elements, tools, and practices of effective leadership and management required to function as an intermediate level officer (Chief of Naval Education and Training, 1997). Considering the manpower and financial resources expended, is this training effective? Do students use the information taught once they return to the work site? Did transfer of learning occur? These questions were explored in an ongoing study to determine what IOLTC curriculum topics had the greatest influence on modifying their leadership behavior. The study group consisted of IOLTC students at the Naval Leader Training Unit Coronado who were surveyed after completion of the course to determine if their leadership behaviors changed as a result of completion of the IOLTC.

In designing the study, the expressed attitudes regarding the value of the IOLTC (dependent variable) were measured with respect to the IOLTC curriculum (independent

variable). Preliminarily, it was prudent to review the IOLTC in the context of an adult learning situation. In comparison to other adult learning groups, the IOLTC was rather homogeneous. The students were both male and female (average ratio of 21:4), relatively close in age and career length (mid-thirties and approximately nine to eleven years active commissioned military service). Most were en route to department head positions at their next command. Their experiential base, though different, was also very similar in many ways since their jobs may differ but they had the same employer. By military definition officers are leaders, though actual leadership experience varies from one career field to the next. Moreover, leadership motivation may vary amongst career fields and the individual's motivation for military service. For example, doctors may be more concerned about practicing medicine and pilots with flying airplanes than leading subordinates. Their motivation for military service then, might more likely be related to low or no-cost training and experience than to serving as a military leader. These factors introduced extraneous variables which were difficult to control and therefore presented a limitation to the study. Additionally, for background information and for the purposes of curriculum unison, the Navy has adopted the following definition of leadership:

“Leadership is the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation” (Chief of Naval Education and Training, 1997).

Statement of the Problem

Is the curriculum in its current configuration the most optimal in terms of impact on IOLTC graduates?

Purpose of the Study

The purpose of the study was to evaluate IOLTC graduates' feedback on 1) adequacy of preparation for implementing the leadership curriculum into their behavior, 2) adequacy of emphasis on each topic contained in the curriculum and 3) current utilization of leadership curriculum in their leadership behavior.

Research Question

The Naval Leader Training Unit Coronado was interested in how well the IOLTC curriculum met the needs of intermediate level officers with respect to improving their leadership skills. The results of the study will be used in reviewing and strengthening programs for present and future students in the IOLTC.

Statement of the Hypothesis

The IOLTC graduates reporting the greatest impact or emphasis of particular curriculum topics will in turn also report a change in their leadership behavior.

Significance of the Study

This study is significant in many respects. First, the collected data gives a pictorial view of the students attending the IOLTC. This will allow the curriculum developers and instructors to compare target audience with intended audience. Secondly, the data collected reinforces the curriculum reviews conducted by the Naval Leader Training Unit and the Chief of Naval Education and Training. Survey results add to the understanding of the effectiveness of the curriculum and indicates areas where the course mission is not met. The curriculum can be further reviewed to change, enhance or delete as necessary in order to meet the course mission to provide advanced education and training in the concepts, philosophies, elements, tools, and

practices of effective leadership and management required to function as an intermediate level officer. The research lends to more knowledgeable and effective instructors and curriculum developers who have a better and more effective product to meet the applicability needs of students. In turn, students will be better equipped to utilize the information to modify, improve, or enhance their leadership behavior.

Definition of Terms

Intermediate Officer - an intermediate officer was a Naval officer with nine to eleven years of commissioned service and, in most cases, held the rank of Lieutenant (O-3) or Lieutenant Commander (O-4).

Scope and Delimitations

Limitations considered in the study were the size of the population (approximately 25 students per IOLTC class per month), varying individual perceptions of curriculum quality and importance, the duration of the study, and the limited location of the study. To address these limitations, three classes were surveyed so as to increase the size of the population. Individual perceptions could not be controlled, but a standard survey instrument was used in an attempt to standardize the feedback for statistical purposes. Additionally, the duration of the study was a subjective time frame selected solely for the purpose of meeting university requirements. A future study may be able to follow a more objective time line as well as include other instructional sites in addition to NLTU Coronado.

Though the study was limited, it is the only known assessment which evaluates whether the knowledge learned in the classroom during the two-week IOLTC is actually applied in the workplace once the IOLTC graduate reports or returns to their duty station.

Outline of the Remainder of the Paper

In Chapter 1, the researcher presented the main problem that was addressed. The researcher also framed and stated the problem, stated the purpose of the study, addressed questions to be answered, and discussed the importance of the study including its scope and delimitations.

Chapter 2 contains a review of literature that provides further information on adult learning, selected learning theories, and transfer of learning.

Chapter 3 contains a description of the methodology and procedures utilized in conducting and completing this study. It includes information on research design, pilot studies, selection of subjects, instrumentation, data collection and recording and analysis of data. Limitations of the research strategy are also addressed.

Chapter 4 is an analysis of the collected data including a descriptive statistical summary and inferential analyses.

Finally, Chapter 5 summarizes the research findings, draws conclusions and proposes recommendations based on the research.

Chapter 2

Review of Literature

Introduction

Before undertaking the actual study of curriculum influence on students, a review of andragogy, learning theories, organizational culture and transfer of learning would also be helpful to the researcher.

Andragogy

In the study of andragogy, Knowles (1984) makes the following assumptions about the design of learning: (1) adults need to know why they need to learn something, (2) adults need to learn experientially, (3) adults approach learning as problem-solving, and (4) adults learn best when the topic is of immediate value. He also points out that while adults are responsive to some external motivators (better jobs, promotions, higher salaries), the most potent motivators are internal pressures (the desire for increased job satisfaction, self-esteem, quality of life) (Knowles, 1984). With more research continuing to support this theory of adult learning (Brookfield, 1986; Knowles, 1990; Goad, 1996), it would be wise then to review any adult curriculum with respect to Knowles' assumptions.

Constructivism

One learning theory to consider when studying curriculum influence is constructivism. Constructivism suggests a way to restructure the learning environment to make the transfer of learning from classroom to work settings more effective (Kerka, 1997). A major theme in the theoretical framework of Bruner (1973) is that learning is an active process in which learners construct new ideas or concepts based upon their current and/or past knowledge. The learner selects and transforms information, constructs hypotheses, and makes decisions, relying on a

cognitive structure to do so. Cognitive structure provides meaning and organization to experiences and allows the individual to “go beyond the information given.” According to Bruner (1966), the instructor should try to encourage students to discover principles by themselves. The instructor and student should engage in an active dialog. The task of the instructor is to translate information to be learned into a format appropriate to the learner’s current state of understanding. Curriculum should be organized in a spiral manner so that the student continually builds upon previously learned information. With respect to the IOLTC, it would appear that a homogeneous student group may have an advantage in this learning theory since the relative similarity of experience throughout the group would enable the instructor to build upon prior learning at an overall consistent rate.

Situated Learning

Another theory of learning is situated learning. Lave (1991), Lankard (1995) and Stein (1998) argue that learning as it normally occurs is a function of the activity, context and culture in which it occurs (i.e., it is situated). This contrasts with most classroom learning activities that involve knowledge which is abstract and out of context. Social interaction is a critical component of situated learning. Learners become involved in a “community of practice” which embodies certain beliefs and behaviors to be acquired. As the beginner or newcomer moves from the periphery of this community to its center, he or she becomes more active and engaged within the culture and assumes the role of expert. Furthermore, situated learning is usually unintentional rather than deliberate. These ideas are what Lave and Wenger (1990) call the process of “legitimate peripheral participation.”

Since leadership training in a classroom is obviously somewhat abstract and out of context, there are some interesting parallels to be drawn from this learning theory for the IOLTC. This theory of learning suggests to the researcher that mentoring and on-the-job training might prove more beneficial in terms of acquiring leadership skills for the long term than would a two-week leadership training course in a classroom.

Transfer of Learning

One of the most fundamental concepts in learning is transfer. Transfer is defined as the ability to apply something learned in one situation to another setting or the improved performance on one task as a result of something acquired on a previous task (Cormier & Hagman, 1987). When preparing for the transfer of learning, an instructor of adults should (1) define the course goals and objectives clearly; (2) include an appropriate amount of material, avoiding too much or too little; (3) schedule the class lessons to include time for questions, participation, and enjoyment; (4) limit the number of facts, figures, or points presented at one time; (5) provide an adequate amount of time for discussions; (6) design the scope of the course with the learners in mind; (7) limit the student preparation time required prior to class; (8) smile, nod, and use positive reinforcement to encourage students; and (9) use open-ended remarks and comments to stimulate more discussion (Whiting, Guglielmino & Burrichter, 1988).

Additionally, students can serve as resources for each other and share their experiences and expertise. Techniques that make use of learners' experiences include group discussions, simulation exercises, laboratory experiences, field experiences and problem-solving projects (Taylor, 1997).

Kerka (1992) contends that critical thinking skills are an important factor in the transfer of learning, therefore teaching strategies to develop these skills is very important. According to Kerka (1992), learning is moving from basic skills and pure facts to linking new information with prior knowledge. Strategies that support higher order thinking include reflections of real-life situations and contexts; collaboration among teachers and students; encouragement of curiosity, exploration, and investigation; responsibility for learning vested in the learner; failure viewed as a learning opportunity; and acknowledgement of effort, not just performance (Stasz et al., 1990; Thomas, 1992). "One of the ways to prepare future employees is to teach students how to think instead of what to think" (Chalupa, 1992, p. 21). To develop these strategies, the IOLTC employs case studies, videos followed by group discussion, student exercises both in and out of class, listening exercises, writing exercises, oral presentations, role playing, and experiential reflection which contribute not only to critical thinking but to transfer of learning as well.

Organizational Culture

Schein (1991) examines organizational culture within which leadership is exercised. Schein contends that leadership is intertwined with culture formation, evolution, transformation, and destruction. Accordingly, leadership has different attributes depending on the point of development of an organization. Since the IOLTC does not liaison with commands or get involved with the leadership development of the organization as a whole, it is possible that the student's leadership training would be beneficial on the individual level but not productive on the organizational level since the student's command culture may be such that it does not foster good leadership practice. The student may then become frustrated and disillusioned with the

leadership training received. Research also supports that many participants leave a training course thinking that they are returning to work with an obstructionist manager who either doesn't understand or favor the training (Rossett, 1997).

Summary

A review of the literature supports that adults do, in fact, learn in very specific ways and for specific reasons. Initially a revolutionary idea, Knowles suggested that: (1) adults need to know why they need to learn something, (2) adults need to learn experientially, (3) adults approach learning as problem-solving, and (4) adults learn best when the topic is of immediate value.

Moreover, there are many theories of learning including constructivism and situated learning. Constructivism suggests a way to restructure the learning environment to make the transfer of learning from classroom to work settings more effective (Kerka, 1997). A major theme in the theoretical framework of Bruner (1973) is that learning is an active process in which learners construct new ideas or concepts based upon their current and/or past knowledge. On the topic of situated learning, Lave (1991), Lankard (1995) and Stein (1998) argue that learning as it normally occurs is a function of the activity, context and culture in which it occurs (i.e., it is situated).

Again, one of the most fundamental concepts in learning is transfer. Transfer is defined as the ability to apply something learned in one situation to another setting or the improved performance on one task as a result of something acquired on a previous task (Cormier & Hagman, 1987).

Even after understanding andragogy, learning theories and transfer of learning, it is important to remember that organizational culture may sabotage the training effort and transfer of learning. As Rossett reports (1997), many participants leave a training course thinking that they are returning to work with an obstructionist manager who either doesn't understand or favor the training. Transfer of learning is less likely to occur under such circumstances.

Chapter 3

Research Methodology

Introduction

The IOLTC covers thirty-three topics which includes an introduction addressing an overview and objectives of the course, adult learning principles, personal introductions, and expectations and norms. The introduction, though not major to the curriculum, is very important in that it addresses the assumptions of adult learning – the who, what, when, why and where, if you will, of the IOLTC. This could be considered the course syllabus. Since the course introduction is administrative in nature and NLTU Coronado had no intentions to change the context of this topic, it was not included in the survey instrument. It is also important to note that students are required to attend the course and, as a result, their motivation might have been lower than if they were entirely self-directed. The researcher's overview of the curriculum indicated that adult learning principles were considered throughout the curriculum design process.

Research Methodology

The researcher selected three classes of the IOLTC without regard to demographics of the students. The classes were selected based on a time line in order that the research, surveys and evaluation were completed by May 1999. The two-week course is conducted monthly and averages about 25 students per class. The research methodology applied was a survey which was distributed to all students in the January, February and March 1999 classes. The post-course survey (survey items 65-96) was completed two to four weeks after the students completed their respective courses. The survey questions were formulated in conjunction with the Naval Leader Training Unit Coronado so as to ensure that the survey was both accurate and relevant to the

command's concerns as stated in the hypothesis. With no feasible way to follow approximately 75 students at 75 locations, the researcher relied on self-reported leadership behaviors and modification. To compensate for threats to the reliability and validity of the study in the absence of a formal control group, the researcher studied three groups using the same survey techniques and line of inquiry along the same longitudinal time line. The researcher's two to four week follow-up surveys were compared to the post-course surveys in order to determine any self-reported modification to leadership behavior.

Pilot Studies

A pilot study of the survey instrument was conducted in January 1999 with selected graduates of the December 1998 session. Results of the pilot test led to some changes in the survey instrument. Since the open-ended question at the end of the survey (survey item 97) duplicated the survey distributed and conducted by the NLTU Coronado, the survey item was eliminated. Small wording changes were also made to enhance understandability. Additionally, the order of the three questions was changed so that IOLTC participants could answer survey items 1-64 throughout the course. The third line of questioning (survey items 65-96) which dealt with utilization of the curriculum in their leadership practice was then answered approximately two to four weeks post-course. More important was a change to the question addressing the amount of emphasis currently allocated to each of the 32 topics. Originally, the current number of instructional hours was listed as a reference. However, instructional time allocation differs between the instructor guide recommendation and the actual amount of time spent in the classroom and from instructor to instructor. Therefore, a student answering the question could answer based on the referenced number of hours or on the amount of time actually spent in class.

As a result, the "current number of hours" reference column was eliminated. Additionally, procedures for distribution were refined. The survey instrument was distributed as a total package with instructions in the cover letter that addressed procedures for responding to questions 65-96. A return envelope was provided to conveniently accommodate return of part two of the survey instrument. Appendix A contains a copy of the letter explaining the importance of the survey and requesting cooperation from graduates along with the survey instrument itself.

Selection of Subjects

All graduates for IOLTC sessions ending on January 15, February 12 and March 5, 1999 were included in the study population sample. The expected sample size was approximately 75. The actual sample size was 69.

Instrumentation

A survey instrument was developed in conjunction with the Naval Leader Training Unit Coronado so as to ensure content and validity of the questions included in the survey. The survey was comprised of two likert scale questions which addressed each of the 32 topics in the IOLTC curriculum and one checklist question which also addressed each of the 32 topics in the IOLTC curriculum. The likert scale statements included in the survey are:

"IOLTC adequately prepared me for implementing this topic in my leadership behaviors."

and

"The knowledge I gained as a result of this topic is currently being utilized in my current leadership role."

The checklist question included in the survey solicits graduates' opinion about the amount of emphasis currently allocated to each of the 32 curriculum topics. For the purpose of the survey, emphasis was interpreted as instructional time allocated to each topic. Graduates were asked to indicate whether the amount of time allocated to each topic should be decreased, remain the same, or be increased. A sample of the text of the survey instrument is also included in Appendix A.

Data Collection and Recording

Data collection was accomplished by including a postage paid return envelope with each survey. IOLTC facilitators gathered duty station addresses and e-mail addresses and phone numbers from graduates during the administrative section of the course. In cases where students were en route to a new duty station and were unsure of their new duty station address, administrative assistance was solicited from the NLTU Coronado Administrative Department and from the Personnel Support Detachment Coronado. (All students participating in IOLTC were on official orders. Information already included on student official orders was used to track down command mailing addresses.) Surveys were distributed to students in class with a cover letter and verbal instructions explaining procedures for answering and returning the survey. However, since some en route students did not have e-mail addresses or know the phone number for their prospective command, e-mail and phone reminders were not done in order to avoid the perception of tampering with portions of the population.

Statview 5.0 was used for data input and statistical evaluation.

Analysis of Data

In analyzing the collected data, a mean was calculated for each of the likert scale items (survey items 1-32, 65-96) and a count of the responses for the checklist items (survey items 33-64). Once the means were calculated, 32 t-tests for non-independent samples were conducted in order to compare mean scores for each topic. In other words, the means for survey items 1 and 65, 2 and 66, 3 and 67, 4 and 68, and so on were compared. The intent of using several statistical processes was to have a well-rounded review of the collected data.

Conclusion

To consider whether transfer of learning occurred and resulted in modification of leadership behavior, the researcher must carefully analyze the follow-up survey. Several conclusions might be suggested from the post-course follow-up: transfer of learning did occur and leadership behavior was modified as a result (this, of course, is the Navy's goal), transfer of learning did occur but behavior was not modified, transfer of learning did not occur. If transfer of learning occurred, further research will be warranted to determine if the graduate did or did not modify behavior because of participation in the IOLTC, because of organizational culture or because of some other reason. A closer look at the collected data follows in Chapter 4.

Chapter 4

Analysis of the Data

Introduction

The data analysis and discussion of the findings of the research are presented in three sections in Chapter 4. The first section presents a descriptive statistical summary and a discussion of the statistics for the returned surveys. The second section presents that data and discusses the inferential analyses of the data as it relates to the hypothesis presented in Chapter 1. The chapter concludes with a summary of the findings.

Descriptive Statistical Summary

Descriptive analyses of survey items 1-32 and 65-96 indicate that responses were consistent and positive with scores ranging from a low mean of 3.25 (survey item 71) to a high mean of 4.292 (survey item 73).

Top 5 low mean scores

Survey item 71	3.25
Survey item 65	3.36
Survey item 86	3.4
Survey item 95	3.44
Survey item 23	3.52

Top 5 high mean scores

Survey item 73	4.292
Survey item 9	4.183
Survey item 15	4.174
Survey item 14	4.169
Survey item 67	4.160
Survey item 68	4.160

Survey items 1-32 were likert scale questions asking students to rate their agreement with the statement "IOLTC adequately prepared me for implementing this topic in my leadership behaviors." Survey items 33-64 asked students' opinions regarding the amount of emphasis (as defined by amount of instructional time) placed on each topic. Students were asked to respond with less, same or more indicating if the amount of emphasis currently spent on each topic was

appropriate. Survey items 65-96 were also likert scale questions which the students answered two to four weeks after completion of the course. Students were asked to rate their agreement with the statement, "The knowledge I gained as a result of this topic is currently being utilized in my current leadership role. Succinctly put then, the first two questions dealt with preparation while the third question dealt with utility.

A closer look at the data with respect to the topics then would suggest the following:

Top 5 low mean scores

Survey item 71	3.25	Students were slightly more than uncertain that the topic of Leadership Models was being currently utilized in their current leadership role.
Survey item 65	3.36	Students were a little more certain that the topic of Deployment of U. S. Policy was being currently utilized in their current leadership role.
Survey item 86	3.4	Students were a little more certain that the topic of Process Management was being currently utilized in their current leadership role.
Survey item 95	3.44	Students were a little more certain that the topic of Risk Management was being currently utilized in their current leadership role.
Survey item 23	3.52	Students tended to agree that the IOLTC adequately prepared them to implement the topic of Process Improvement .

Top 5 high mean scores

Survey item 73	4.292	Students agreed that the topic of Oral Communication was currently being utilized in their current leadership role.
Survey item 9	4.183	Students agreed that the IOLTC adequately prepared them to implement the topic of Oral Communication .
Survey item 15	4.174	Students agreed that the IOLTC adequately prepared them to implement the topic of Evaluation and Counseling .
Survey item 14	4.169	Students agreed that the IOLTC adequately prepared them to implement the topic of Delegation .
Survey item 67	4.160	Students agreed that the topic of Responsibility, Authority, and Accountability was currently being utilized in their current leadership role.

Survey item 68 4.160 Students agreed that the topic of **Ethics and Core Values** was currently being utilized in their current leadership role.

Inferential data analyses follows.

Inferential Data Analyses

In Chapter 1, the researcher stated the hypothesis as:

The IOLTC graduates reporting the greatest impact or emphasis of particular curriculum topics will in turn also report a change in their leadership behavior.

Therefore, to compare impact with reported change in leadership behavior, paired t-tests were computed comparing corresponding survey items 1-32 with 65-96 respectively in an effort to analyze student responses with respect to preparation versus utility. Five topics had statistically significant probability values of less than .05:

<u>Survey Items Compared</u>	<u>P-Value</u>	<u>Curriculum Topic</u>
1, 65	.0218	Topic 1-1 Deployment of U. S. Policy
6, 70	.0279	Topic 1-6 Leadership Models
7, 71	.0046	Topic 1-7 Systems Theory
11, 75	.0395	Topic 2-4 Situational Communications
13, 77	.0136	Topic 3-1 Motivation

A closer look at the data with respect to the questions then would suggest the following:

<u>Survey Item</u>	<u>Mean</u>	<u>Survey Item</u>	<u>Mean</u>	<u>Curriculum Topic</u>	<u>Descriptive result</u>
1	3.714	65	3.36	Deployment of U. S. Policy	Students tended to agree that IOLTC adequately prepared them to implement these topics and had slightly less agreement that that these topics were currently being utilized in their current leadership role.
6	3.876	70	3.84	Leadership Models	
7	3.704	71	3.25	Systems Theory	
11	4.00	75	3.88	Situational Communications	
13	4.103	77	3.84	Motivation	

Survey results for items 33-64 were cross tabulated using 3x5 contingency tables though the application of that procedure is questionable due to low cell frequency. Since validity of the results would therefore be questionable, the researcher will offer no interpretation of this data. The statistical application was useful, however, in providing the frequency of response data reported below:

Topics with highest frequency of response for less emphasis

<u>Survey Item</u>	<u>N=</u>	<u>Curriculum Topic</u>
55	30	Process Improvement
54	25	Process Management
53	21	Quality
39	21	Systems

Topics with highest frequency of response for more emphasis

<u>Survey Item</u>	<u>N=</u>	<u>Curriculum Topic</u>
64	18	Combat/Crisis Leadership
47	17	Evaluation and Counseling
49	17	Personal and Professional Development
36	15	Ethics and Core Values
42	15	Written Communications

Summary

In summary, descriptive data results were consistent and positive. Paired t-tests indicated that five topics had statistically significant probability values of less than .05. The chi-square statistical test was of questionable validity due to low cell frequency but did offer frequency distribution data. A complete listing of statistical findings can be found in Appendix B. While conclusions will not be drawn from the chi-square data, interpretation and recommendations are addressed in Chapter 5.

Chapter 5

Summary and Conclusions

Introduction

Chapter 5 summarizes the research findings, draws conclusions and proposes recommendations based on the research.

Summary

The purpose of the study was to evaluate IOLTC graduates' feedback on 1) adequacy of preparation for implementing the leadership curriculum into their behavior, 2) adequacy of emphasis on each topic contained in the curriculum and 3) current utilization of leadership curriculum in their leadership behavior.

Analyses of the data indicate that responses were consistent and positive. Regarding the hypothesis, there appears to be a general trend that the IOLTC did have impact and that the content was utilized in subsequent leadership behavior.

Conclusions

A review of the data allows the researcher to draw conclusions, the first being that IOLTC students were generally satisfied with curriculum topic preparation, emphasis, and utility. That would also indicate that some level of transfer of learning occurred and that students do, at least to some extent, use the information taught in the course once they return to the work site. Generally, it would appear that the course mission to provide advanced education and training in the concepts, philosophies, elements, tools, and practices of effective leadership and management required to function as an intermediate level officer is being met.

The data also indicates, however, that there may be room to improve the curriculum in certain areas. Curriculum topics scoring high indicating a desire for more or less emphasis might

serve as a starting point for further review of both the curriculum itself and student needs

particularly those that also scored high or low mean scores. Those topics include:

Topic 1-4 Ethics and Core Values	High mean score for utility Desire for more emphasis
Topic 3-3 Evaluation and Counseling	High mean score for preparation Desire for more emphasis
Topic 4-4 Process Management	Low mean score for utility Desire for less emphasis
Topic 4-5 Process Improvement	Low mean score for preparation Desire for less emphasis

Generally speaking the differences between mean scores were negligible. That preparation scores were higher than utility scores might suggest that students did not have enough time to utilize the leadership behaviors before being surveyed. Utilization surveys conducted along a longer time line might provide a more reasonable time frame for incorporating the curriculum topics into leadership behavior.

The collected data gives a pictorial view of the students attending the IOLTC. It allows the curriculum developers and instructors to compare target audience with intended audience, reinforces curriculum reviews conducted by the NLTU Coronado and the Chief of Naval Education and Training and adds to the understanding of the effectiveness of the curriculum and indicates areas where the course mission is not as aptly met.

Recommendations

The curriculum can now be further reviewed to change, enhance or delete as necessary in order to improve upon meeting the course mission. Further research might address:

- Whether the students felt they knew why they needed to learn the subject matter,

- Whether the course took advantage of students' experiential base,
- Whether the course addressed any leadership problem areas they have encountered,
- Whether the subject matter was of immediate value to them and
- What their motivation level was to participate in the curriculum.

This information could then be compared to the post-topic (survey items 1-64) and post-course surveys (survey items 65-96).

Since the IOLTC currently conducts post-course surveys, those surveys could also be compared to the research data. Open-ended post-course survey line of inquiry questions could also assist in future studies. Moreover, an online version of the survey instrument for items 65-96 might improve response, which would allow for more correlation between preparation and utility.

Statistical analyses from this survey, conclusions and recommendations will be discussed with IOLTC curriculum developers, instructors, and the Naval Leader Training Unit chain of command. The findings may lead to greater understanding of student needs and expectations and improved curriculum thereby providing Department of Navy personnel the highest quality leadership education and training in order to improve mission performance.

References

- Brookfield, S. (1986). *Understanding and facilitating adult learning*. San Francisco: Jossey-Bass.
- Bruner, J. (1966). *Toward a theory of instruction*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1973). *Going beyond the information given*. New York: Norton.
- Chalupa, M. (1992, October). Critical thinking – getting minds to work. Better Education Forum 47, no. 1, 21-24.
- Chief of Naval Operations, (1997). *Intermediate Officer Leadership Course Instructor Guide*. Washington, DC: Department of the Navy.
- Cormier, S. & Hagman, J. (1987). *Transfer of learning*. San Diego, CA: Academic Press.
- Dalton, J. (1994). *Forward...from the sea*. Washington, DC: Department of the Navy.
- Goad, T. (1996). Education vs. training: what difference does it make? Paper presented at the 1996 Lifelong Learning conference. Available at <http://www2.nu.edu/nuri/llconf/conf1996/agoad.html>.
- Kerka, S. (1992). Higher order thinking skills in vocational education. (ERIC Digest No. 127). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education Center on Education and Training for Employment. (ERIC Document Reproduction Service No. ED 350 487)

Kerka, S. (1997). Constructivism, workplace learning, and vocational education. (ERIC Digest No. 181). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

Knowles, M. (1984). *The adult learner: a neglected species* (3rd ed.). Houston, TX: Gulf Publishing.

Knowles, M. (1990). *The adult learner: a neglected species* (rev. ed.). Houston, TX: Gulf Publishing.

Lankard, B. A. (1995). New ways of learning in the workplace. (ERIC Digest No. 161). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

Lave, J. (1988). *Cognition in practice: mind, mathematics, and culture in everyday life*. Cambridge, UK: Cambridge University Press.

Lave, J. & Wenger, E. (1990). *Situated learning: legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.

Rossett, A. (1997). That was a great class, but... Training and Development, 51, 18-24.

Schein, E. (1991). *Organizational culture and leadership: a dynamic view*. San Francisco, CA: Jossey-Bass.

Stasz, C.; McArthur, D.; Lewis, M. & Ramsey, K. (1990). Teaching and learning generic skills for the workplace. Berkeley: University of California, National Center for Research in Vocational Education. (ERIC Document Reproduction Service No. ED 329 682)

Steom, D. (1998). Situated learning in adult education. (ERIC Digest No. 195). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

Taylor, M. (1997). Transfer of learning: Planning effective workplace education programs. Ottawa, Ontario: National Literacy Secretariat.

Thomas, R. (1992). Cognitive theory-based teaching and learning in vocational education (Information Series No. 349). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 345 109)

Whiting, S., Guglielmino, L. & Burrichter, A. (1988). Adult development. What do teachers of adults need to know? Boca Raton, FL: Florida Atlantic University, Adult Education Office.

Appendix A

Survey Cover Letter and Instrument



DEPARTMENT OF THE NAVY

NAVAL LEADER TRAINING UNIT
3423 GUADALCANAL ROAD
NAVPHIBASE CORONADO
SAN DIEGO, CA 92155-5099

IN REPLY REFER TO :

1500

1 Feb 99

From: Director, Naval Leader Training Unit, Coronado

To: Intermediate Officer Leadership Training Course Graduate

Subj: INTERMEDIATE OFFICER LEADERSHIP TRAINING COURSE SURVEY

1. The Curriculum Department of the Naval Leadership Training Unit, Coronado (NLTUC) is conducting a survey of recent graduates in order to gather data on attitudes and opinions regarding the Intermediate Officer Leadership Training Course and its applicability to your leadership performance. We are interested in how well the NLTUC met your needs with respect to improving your leadership skills. The results of this survey will be used for graduate education research and will directly support our current curriculum revision process.
2. Your name was randomly selected from a list of all graduates from November 1998 through February 1999. Questions 1 to 64 should be completed throughout the course and returned to the facilitator on the last day of class. Questions 65 to 96 should be completed approximately two weeks after completion of the course. Responding should take less than 20 minutes of your time. Each survey provides measurable feedback for curriculum improvement efforts. Thank you for completing the questionnaire and returning it by 15 March 1999 in the envelope provided.
3. Your responses will remain completely confidential. You will note a number on your survey form. This number is for correlation purposes only and is intended to maintain the integrity of the survey results. If you are interested in receiving a summary of the results, please write the word "summary" on the bottom left of the return envelope and it will be mailed to you by mid-summer.
4. If you have questions about the study, please contact LT Kate Janac at (619) 437-5170 or DSN 577-5170. Your assistance is greatly appreciated.

A handwritten signature in black ink, appearing to read "L. C. Shaffer-Vanaria", is positioned above the printed name.

L. C. SHAFFER-VANARIA

Curriculum Influence of the Intermediate Officer Leadership Training Course

Questions 1-32 are intended to get your perceptions about each of the 32 topics of the Intermediate Officer Leadership Training Course (IOLTC) as they relate to **preparation for implementing the topic into your leadership behavior**. In other words, *how well did the topic prepare you for improving your leadership skills*. Feel free to refer to your IOLTC Student Guide if necessary. If you were not present during instruction of a particular topic, please do not respond to that item. Circle the response which reflects your opinion using the following scale:

SD	=	Strongly Disagree
D	=	Disagree
U	=	Uncertain
A	=	Agree
SA	=	Strongly Agree

IOLTC adequately prepared me for implementing this topic in my leadership behaviors.

- | | | | | | |
|--|----|---|---|---|----|
| 1. Topic 1-1 Deployment of U. S. Policy | SD | D | U | A | SA |
| 2. Topic 1-2 Foundations of Leadership | SD | D | U | A | SA |
| 3. Topic 1-3 Responsibility, Authority, and Accountability | SD | D | U | A | SA |
| 4. Topic 1-4 Ethics and Core Values | SD | D | U | A | SA |
| 5. Topic 1-5 Change | SD | D | U | A | SA |
| 6. Topic 1-6 Leadership Models | SD | D | U | A | SA |
| 7. Topic 1-7 Systems Theory | SD | D | U | A | SA |
| 8. Topic 2-1 Communication Concepts | SD | D | U | A | SA |
| 9. Topic 2-2 Oral Communications | SD | D | U | A | SA |
| 10. Topic 2-3 Written Communications | SD | D | U | A | SA |
| 11. Topic 2-4 Situational Communications | SD | D | U | A | SA |
| 12. Topic 2-5 Interpersonal Relationships | SD | D | U | A | SA |
| 13. Topic 3-1 Motivation | SD | D | U | A | SA |
| 14. Topic 3-2 Delegation | SD | D | U | A | SA |
| 15. Topic 3-3 Evaluation and Counseling | SD | D | U | A | SA |
| 16. Topic 3-4 Recognition | SD | D | U | A | SA |
| 17. Topic 3-5 Personal and Professional Development | SD | D | U | A | SA |
| 18. Topic 3-6 Mentoring | SD | D | U | A | SA |
| 19. Topic 4-1 Planning | SD | D | U | A | SA |
| 20. Topic 4-2 Resource Management | SD | D | U | A | SA |
| 21. Topic 4-3 Quality | SD | D | U | A | SA |
| 22. Topic 4-4 Process Management | SD | D | U | A | SA |
| 23. Topic 4-5 Process Improvement | SD | D | U | A | SA |
| 24. Topic 4-6 Management of Teams | SD | D | U | A | SA |
| 25. Topic 5-1 Developing Command Unity | SD | D | U | A | SA |
| 26. Topic 5-2 Quality of Life | SD | D | U | A | SA |
| 27. Topic 5-3 Customs, Traditions, Honors, and Ceremonies | SD | D | U | A | SA |
| 28. Topic 5-4 Command Climate | SD | D | U | A | SA |
| 29. Topic 6-1 Decision Making | SD | D | U | A | SA |
| 30. Topic 6-2 Stress Management | SD | D | U | A | SA |
| 31. Topic 6-3 Risk Management | SD | D | U | A | SA |
| 32. Topic 7-1 Combat/Crisis Leadership | SD | D | U | A | SA |

Curriculum Influence of the Intermediate Officer Leadership Training Course

Questions 33-64 are intended to solicit your opinion about the **amount of emphasis** currently allocated to each of the 32 topics. **In your opinion, is the amount of emphasis currently spent on each topic appropriate?** For the purpose of this survey, emphasis is interpreted as instructional time allocated to each topic. Please respond to each of the items below by indicating if the emphasis should be increased, remain the same, or decreased. Circle Less, Same or More for your response.

Less, Same or More?
Circle one for each item

33. Topic 1-1 Deployment of U. S. Policy	Less	Same	More
34. Topic 1-2 Foundations of Leadership	Less	Same	More
35. Topic 1-3 Responsibility, Authority, and Accountability	Less	Same	More
36. Topic 1-4 Ethics and Core Values	Less	Same	More
37. Topic 1-5 Change	Less	Same	More
38. Topic 1-6 Leadership Models	Less	Same	More
39. Topic 1-7 Systems Theory	Less	Same	More
40. Topic 2-1 Communication Concepts	Less	Same	More
41. Topic 2-2 Oral Communications	Less	Same	More
42. Topic 2-3 Written Communications	Less	Same	More
43. Topic 2-4 Situational Communications	Less	Same	More
44. Topic 2-5 Interpersonal Relationships	Less	Same	More
45. Topic 3-1 Motivation	Less	Same	More
46. Topic 3-2 Delegation	Less	Same	More
47. Topic 3-3 Evaluation and Counseling	Less	Same	More
48. Topic 3-4 Recognition	Less	Same	More
49. Topic 3-5 Personal and Professional Development	Less	Same	More
50. Topic 3-6 Mentoring	Less	Same	More
51. Topic 4-1 Planning	Less	Same	More
52. Topic 4-2 Resource Management	Less	Same	More
53. Topic 4-3 Quality	Less	Same	More
54. Topic 4-4 Process Management	Less	Same	More
55. Topic 4-5 Process Improvement	Less	Same	More
56. Topic 4-6 Management of Teams	Less	Same	More
57. Topic 5-1 Developing Command Unity	Less	Same	More
58. Topic 5-2 Quality of Life	Less	Same	More
59. Topic 5-3 Customs, Traditions, Honors, and Ceremonies	Less	Same	More
60. Topic 5-4 Command Climate	Less	Same	More
61. Topic 6-1 Decision Making	Less	Same	More
62. Topic 6-2 Stress Management	Less	Same	More
63. Topic 6-3 Risk Management	Less	Same	More
64. Topic 7-1 Combat/Crisis Leadership	Less	Same	More

Curriculum Influence of the Intermediate Officer Leadership Training Course

Questions 65-96 are intended to solicit your perceptions about each of the 32 topics of the Intermediate Officer Leadership Training Course (IOLTC) **as they relate to enhancing your performance as a leader**. Feel free to refer to your IOLTC Student Guide if necessary. If for some reason, you were not present during instruction of a particular topic, please do not respond to that item. Circle the response which reflects your opinion using the following scale:

SD	=	Strongly Disagree
D	=	Disagree
U	=	Uncertain
A	=	Agree
SA	=	Strongly Agree

The knowledge I gained as a result of this topic is currently being utilized in my current leadership role.

65. Topic 1-1 Deployment of U. S. Policy	SD	D	U	A	SA
66. Topic 1-2 Foundations of Leadership	SD	D	U	A	SA
67. Topic 1-3 Responsibility, Authority, and Accountability	SD	D	U	A	SA
68. Topic 1-4 Ethics and Core Values	SD	D	U	A	SA
69. Topic 1-5 Change	SD	D	U	A	SA
70. Topic 1-6 Leadership Models	SD	D	U	A	SA
71. Topic 1-7 Systems Theory	SD	D	U	A	SA
72. Topic 2-1 Communication Concepts	SD	D	U	A	SA
73. Topic 2-2 Oral Communications	SD	D	U	A	SA
74. Topic 2-3 Written Communications	SD	D	U	A	SA
75. Topic 2-4 Situational Communications	SD	D	U	A	SA
76. Topic 2-5 Interpersonal Relationships	SD	D	U	A	SA
77. Topic 3-1 Motivation	SD	D	U	A	SA
78. Topic 3-2 Delegation	SD	D	U	A	SA
79. Topic 3-3 Evaluation and Counseling	SD	D	U	A	SA
80. Topic 3-4 Recognition	SD	D	U	A	SA
81. Topic 3-5 Personal and Professional Development	SD	D	U	A	SA
82. Topic 3-6 Mentoring	SD	D	U	A	SA
83. Topic 4-1 Planning	SD	D	U	A	SA
84. Topic 4-2 Resource Management	SD	D	U	A	SA
85. Topic 4-3 Quality	SD	D	U	A	SA
86. Topic 4-4 Process Management	SD	D	U	A	SA
87. Topic 4-5 Process Improvement	SD	D	U	A	SA
88. Topic 4-6 Management of Teams	SD	D	U	A	SA
89. Topic 5-1 Developing Command Unity	SD	D	U	A	SA
90. Topic 5-2 Quality of Life	SD	D	U	A	SA
91. Topic 5-3 Customs, Traditions, Honors, and Ceremonies	SD	D	U	A	SA
92. Topic 5-4 Command Climate	SD	D	U	A	SA
93. Topic 6-1 Decision Making	SD	D	U	A	SA
94. Topic 6-2 Stress Management	SD	D	U	A	SA
95. Topic 6-3 Risk Management	SD	D	U	A	SA
96. Topic 7-1 Combat/Crisis Leadership	SD	D	U	A	SA

Appendix B

Statistical Data

Descriptive Statistics

	Column 1
Mean	3.714
Std. Dev.	.725
Std. Error	.087
Count	70
Minimum	1.000
Maximum	5.000
# Missing	13

Descriptive Statistics

	Column 5
Mean	4.155
Std. Dev.	.624
Std. Error	.074
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 9
Mean	4.183
Std. Dev.	.639
Std. Error	.076
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 2
Mean	4.000
Std. Dev.	.655
Std. Error	.078
Count	71
Minimum	1.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 6
Mean	3.873
Std. Dev.	.844
Std. Error	.100
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 10
Mean	4.000
Std. Dev.	.756
Std. Error	.090
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 3
Mean	4.127
Std. Dev.	.653
Std. Error	.078
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 7
Mean	3.704
Std. Dev.	.818
Std. Error	.097
Count	71
Minimum	1.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 11
Mean	4.000
Std. Dev.	.535
Std. Error	.063
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 4
Mean	4.099
Std. Dev.	.700
Std. Error	.083
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 8
Mean	4.099
Std. Dev.	.589
Std. Error	.070
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 12
Mean	4.000
Std. Dev.	.609
Std. Error	.072
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 13
Mean	4.103
Std. Dev.	.736
Std. Error	.089
Count	68
Minimum	1.000
Maximum	5.000
# Missing	15

Descriptive Statistics

	Column 17
Mean	4.099
Std. Dev.	.658
Std. Error	.078
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 21
Mean	3.718
Std. Dev.	.831
Std. Error	.099
Count	71
Minimum	1.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 14
Mean	4.169
Std. Dev.	.609
Std. Error	.072
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 18
Mean	3.930
Std. Dev.	.884
Std. Error	.105
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 22
Mean	3.592
Std. Dev.	.919
Std. Error	.109
Count	71
Minimum	1.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 15
Mean	4.174
Std. Dev.	.727
Std. Error	.087
Count	69
Minimum	2.000
Maximum	5.000
# Missing	14

Descriptive Statistics

	Column 19
Mean	3.972
Std. Dev.	.774
Std. Error	.092
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 23
Mean	3.529
Std. Dev.	.928
Std. Error	.111
Count	70
Minimum	1.000
Maximum	5.000
# Missing	13

Descriptive Statistics

	Column 16
Mean	4.042
Std. Dev.	.685
Std. Error	.081
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 20
Mean	3.886
Std. Dev.	.753
Std. Error	.090
Count	70
Minimum	1.000
Maximum	5.000
# Missing	13

Descriptive Statistics

	Column 24
Mean	4.070
Std. Dev.	.781
Std. Error	.093
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 25
Mean	3.843
Std. Dev.	.673
Std. Error	.080
Count	70
Minimum	2.000
Maximum	5.000
# Missing	13

Descriptive Statistics

	Column 29
Mean	4.015
Std. Dev.	.615
Std. Error	.075
Count	67
Minimum	2.000
Maximum	5.000
# Missing	16

Descriptive Statistics

	Column 26
Mean	3.871
Std. Dev.	.779
Std. Error	.093
Count	70
Minimum	1.000
Maximum	5.000
# Missing	13

Descriptive Statistics

	Column 30
Mean	3.841
Std. Dev.	.678
Std. Error	.082
Count	69
Minimum	2.000
Maximum	5.000
# Missing	14

Descriptive Statistics

	Column 27
Mean	3.824
Std. Dev.	.752
Std. Error	.091
Count	68
Minimum	2.000
Maximum	5.000
# Missing	15

Descriptive Statistics

	Column 31
Mean	4.014
Std. Dev.	.752
Std. Error	.090
Count	70
Minimum	1.000
Maximum	5.000
# Missing	13

Descriptive Statistics

	Column 28
Mean	3.915
Std. Dev.	.770
Std. Error	.091
Count	71
Minimum	2.000
Maximum	5.000
# Missing	12

Descriptive Statistics

	Column 32
Mean	4.016
Std. Dev.	.707
Std. Error	.089
Count	63
Minimum	2.000
Maximum	5.000
# Missing	20

Descriptive Statistics

	Column 65
Mean	3.360
Std. Dev.	1.114
Std. Error	.223
Count	25
Minimum	1.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 69
Mean	4.000
Std. Dev.	.866
Std. Error	.173
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 73
Mean	4.292
Std. Dev.	.550
Std. Error	.112
Count	24
Minimum	3.000
Maximum	5.000
# Missing	59

Descriptive Statistics

	Column 66
Mean	3.920
Std. Dev.	.640
Std. Error	.128
Count	25
Minimum	3.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 70
Mean	3.840
Std. Dev.	.943
Std. Error	.189
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 74
Mean	4.080
Std. Dev.	.702
Std. Error	.140
Count	25
Minimum	3.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 67
Mean	4.160
Std. Dev.	.554
Std. Error	.111
Count	25
Minimum	3.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 71
Mean	3.250
Std. Dev.	.676
Std. Error	.138
Count	24
Minimum	2.000
Maximum	5.000
# Missing	59

Descriptive Statistics

	Column 75
Mean	3.880
Std. Dev.	.781
Std. Error	.156
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 68
Mean	4.160
Std. Dev.	.554
Std. Error	.111
Count	25
Minimum	3.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 72
Mean	4.125
Std. Dev.	.680
Std. Error	.139
Count	24
Minimum	3.000
Maximum	5.000
# Missing	59

Descriptive Statistics

	Column 76
Mean	4.040
Std. Dev.	.790
Std. Error	.158
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 77
Mean	3.840
Std. Dev.	.943
Std. Error	.189
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 81
Mean	3.880
Std. Dev.	.726
Std. Error	.145
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 85
Mean	3.680
Std. Dev.	.802
Std. Error	.160
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 78
Mean	3.920
Std. Dev.	.862
Std. Error	.172
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 82
Mean	3.720
Std. Dev.	.891
Std. Error	.178
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 86
Mean	3.400
Std. Dev.	.957
Std. Error	.191
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 79
Mean	4.040
Std. Dev.	.676
Std. Error	.135
Count	25
Minimum	3.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 83
Mean	3.960
Std. Dev.	.735
Std. Error	.147
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 87
Mean	3.560
Std. Dev.	.870
Std. Error	.174
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 80
Mean	3.960
Std. Dev.	.790
Std. Error	.158
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 84
Mean	3.880
Std. Dev.	.781
Std. Error	.156
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 88
Mean	3.680
Std. Dev.	.852
Std. Error	.170
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 89
Mean	3.560
Std. Dev.	.961
Std. Error	.192
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 93
Mean	3.917
Std. Dev.	.654
Std. Error	.133
Count	24
Minimum	2.000
Maximum	5.000
# Missing	59

Descriptive Statistics

	Column 90
Mean	3.560
Std. Dev.	.961
Std. Error	.192
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 94
Mean	3.680
Std. Dev.	.690
Std. Error	.138
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 91
Mean	3.720
Std. Dev.	.936
Std. Error	.187
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 95
Mean	3.440
Std. Dev.	.583
Std. Error	.117
Count	25
Minimum	2.000
Maximum	4.000
# Missing	58

Descriptive Statistics

	Column 92
Mean	3.680
Std. Dev.	.852
Std. Error	.170
Count	25
Minimum	2.000
Maximum	5.000
# Missing	58

Descriptive Statistics

	Column 96
Mean	3.542
Std. Dev.	.884
Std. Error	.180
Count	24
Minimum	2.000
Maximum	5.000
# Missing	59

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 1, Column 65	.692	12	2.635	.0218

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 1	3.714	.725	.087	70	1.000	5.000	13
Column 65	3.360	1.114	.223	25	1.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 2, Column 66	.154	12	.805	.4363

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 2	4.000	.655	.078	71	1.000	5.000	12
Column 66	3.920	.640	.128	25	3.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 3, Column 67	.308	12	1.760	.1039

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 3	4.127	.653	.078	71	2.000	5.000	12
Column 67	4.160	.554	.111	25	3.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 4, Column 68	.308	12	1.477	.1654

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 4	4.099	.700	.083	71	2.000	5.000	12
Column 68	4.160	.554	.111	25	3.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 5, Column 69	.385	12	1.443	.1745

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 5	4.155	.624	.074	71	2.000	5.000	12
Column 69	4.000	.866	.173	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 6, Column 70	.538	12	2.501	.0279

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 6	3.873	.844	.100	71	2.000	5.000	12
Column 70	3.840	.943	.189	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 7, Column 71	.667	11	3.546	.0046

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 7	3.704	.818	.097	71	1.000	5.000	12
Column 71	3.250	.676	.138	24	2.000	5.000	59

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 8, Column 72	.333	11	1.483	.1661

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 8	4.099	.589	.070	71	2.000	5.000	12
Column 72	4.125	.680	.139	24	3.000	5.000	59

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 9, Column 73	.250	11	1.393	.1911

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 9	4.183	.639	.076	71	2.000	5.000	12
Column 73	4.292	.550	.112	24	3.000	5.000	59

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 10, Column 74	.385	12	2.132	.0544

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 10	4.000	.756	.090	71	2.000	5.000	12
Column 74	4.080	.702	.140	25	3.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 11, Column 75	.308	12	2.309	.0395

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 11	4.000	.535	.063	71	2.000	5.000	12
Column 75	3.880	.781	.156	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 12, Column 76	.077	12	.322	.7533

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 12	4.000	.609	.072	71	2.000	5.000	12
Column 76	4.040	.790	.158	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 13, Column 77	.615	12	2.889	.0136

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 13	4.103	.736	.089	68	1.000	5.000	15
Column 77	3.840	.943	.189	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 14, Column 78	.308	12	1.477	.1654

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 14	4.169	.609	.072	71	2.000	5.000	12
Column 78	3.920	.862	.172	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 15, Column 79	.231	12	1.000	.3370

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 15	4.174	.727	.087	69	2.000	5.000	14
Column 79	4.040	.676	.135	25	3.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 16, Column 80	.308	12	1.298	.2188

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 16	4.042	.685	.081	71	2.000	5.000	12
Column 80	3.960	.790	.158	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 17, Column 81	.385	12	2.132	.0544

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 17	4.099	.658	.078	71	2.000	5.000	12
Column 81	3.880	.726	.145	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 18, Column 82	.154	12	.395	.6999

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 18	3.930	.884	.105	71	2.000	5.000	12
Column 82	3.720	.891	.178	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 19, Column 83	.308	12	1.477	.1654

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 19	3.972	.774	.092	71	2.000	5.000	12
Column 83	3.960	.735	.147	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 20, Column 84	.308	12	1.298	.2188

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 20	3.886	.753	.090	70	1.000	5.000	13
Column 84	3.880	.781	.156	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 21, Column 85	.154	12	.617	.5486

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 21	3.718	.831	.099	71	1.000	5.000	12
Column 85	3.680	.802	.160	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 22, Column 86	.154	12	.485	.6364

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 22	3.592	.919	.109	71	1.000	5.000	12
Column 86	3.400	.957	.191	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 23, Column 87	-.154	12	-.617	.5486

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 23	3.529	.928	.111	70	1.000	5.000	13
Column 87	3.560	.870	.174	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 24, Column 88	.385	12	1.162	.2676

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 24	4.070	.781	.093	71	2.000	5.000	12
Column 88	3.680	.852	.170	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 25, Column 89	.462	12	1.585	.1390

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 25	3.843	.673	.080	70	2.000	5.000	13
Column 89	3.560	.961	.192	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 26, Column 90	.308	12	1.075	.3033

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 26	3.871	.779	.093	70	1.000	5.000	13
Column 90	3.560	.961	.192	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 27, Column 91	.077	12	.322	.7533

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 27	3.824	.752	.091	68	2.000	5.000	15
Column 91	3.720	.936	.187	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 28, Column 92	.231	12	.898	.3870

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 28	3.915	.770	.091	71	2.000	5.000	12
Column 92	3.680	.852	.170	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 29, Column 93	.083	11	.561	.5863

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 29	4.015	.615	.075	67	2.000	5.000	16
Column 93	3.917	.654	.133	24	2.000	5.000	59

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 30, Column 94	.385	12	1.594	.1368

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 30	3.841	.678	.082	69	2.000	5.000	14
Column 94	3.680	.690	.138	25	2.000	5.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 31, Column 95	.385	12	1.806	.0961

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 31	4.014	.752	.090	70	1.000	5.000	13
Column 95	3.440	.583	.117	25	2.000	4.000	58

Paired t-test**Hypothesized Difference = 0**

	Mean Diff.	DF	t-Value	P-Value
Column 32, Column 96	.417	11	1.332	.2098

Descriptive Statistics

	Mean	Std. Dev.	Std. Error	Count	Minimum	Maximum	# Missing
Column 32	4.016	.707	.089	63	2.000	5.000	20
Column 96	3.542	.884	.180	24	2.000	5.000	59

Summary Table for Column 1, Column 33

Num. Missing	14
DF	8
Chi Square	12.834
Chi Square P-Value	.1177
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.396
Cramer's V	.305

Observed Frequencies for Column 1, Column 33

	1	2	3	Totals
1	1	0	0	1
2	0	3	1	4
3	3	8	2	13
4	4	39	4	47
5	0	3	1	4
Totals	8	53	8	69

Summary Table for Column 2, Column 34

Num. Missing	14
DF	8
Chi Square	14.550
Chi Square P-Value	.0685
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.417
Cramer's V	.325

Observed Frequencies for Column 2, Column 34

	1	2	3	Totals
1	0	1	0	1
2	0	0	1	1
3	1	4	1	6
4	7	39	4	50
5	0	11	0	11
Totals	8	55	6	69

Summary Table for Column 3, Column 35

Num. Missing	14
DF	6
Chi Square	8.262
Chi Square P-Value	.2195
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.327
Cramer's V	.245

Observed Frequencies for Column 3, Column 35

	1	2	3	Totals
2	1	1	0	2
3	1	3	0	4
4	3	32	10	45
5	2	15	1	18
Totals	7	51	11	69

Summary Table for Column 4, Column 36

Num. Missing	14
DF	6
Chi Square	22.009
Chi Square P-Value	.0012
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.492
Cramer's V	.399

Observed Frequencies for Column 4, Column 36

	1	2	3	Totals
2	0	0	3	3
3	2	3	0	5
4	3	34	7	44
5	0	12	5	17
Totals	5	49	15	69

Summary Table for Column 5, Column 37

Num. Missing	14
DF	6
Chi Square	11.568
Chi Square P-Value	.0723
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.379
Cramer's V	.290

Observed Frequencies for Column 5, Column 37

	1	2	3	Totals
2	0	1	0	1
3	3	3	0	6
4	10	32	3	45
5	0	13	4	17
Totals	13	49	7	69

Summary Table for Column 6, Column 38

Num. Missing	14
DF	6
Chi Square	9.034
Chi Square P-Value	.1717
G-Squared	8.183
G-Squared P-Value	.2250
Contingency Coef.	.340
Cramer's V	.256

Observed Frequencies for Column 6, Column 38

	1	2	3	Totals
2	2	1	3	6
3	3	5	1	9
4	7	28	5	40
5	2	10	2	14
Totals	14	44	11	69

Summary Table for Column 7, Column 39

Num. Missing	14
DF	8
Chi Square	14.642
Chi Square P-Value	.0665
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.418
Cramer's V	.326

Observed Frequencies for Column 7, Column 39

	1	2	3	Totals
1	1	0	0	1
2	4	1	0	5
3	7	8	1	16
4	8	31	1	40
5	1	5	1	7
Totals	21	45	3	69

Summary Table for Column 8, Column 40

Num. Missing	14
DF	6
Chi Square	2.769
Chi Square P-Value	.8373
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.196
Cramer's V	.142

Observed Frequencies for Column 8, Column 40

	1	2	3	Totals
2	0	1	0	1
3	2	4	0	6
4	6	35	6	47
5	2	11	2	15
Totals	10	51	8	69

Summary Table for Column 9, Column 41

Num. Missing	14
DF	6
Chi Square	17.666
Chi Square P-Value	.0071
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.451
Cramer's V	.358

Observed Frequencies for Column 9, Column 41

	1	2	3	Totals
2	1	0	0	1
3	3	3	0	6
4	6	31	4	41
5	0	16	5	21
Totals	10	50	9	69

Summary Table for Column 10, Column 42

Num. Missing	14
DF	6
Chi Square	14.938
Chi Square P-Value	.0207
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.422
Cramer's V	.329

Observed Frequencies for Column 10, Column 42

	1	2	3	Totals
2	2	1	0	3
3	4	5	2	11
4	6	26	6	38
5	0	10	7	17
Totals	12	42	15	69

Summary Table for Column 11, Column 43

Num. Missing	14
DF	6
Chi Square	8.222
Chi Square P-Value	.2223
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.326
Cramer's V	.244

Observed Frequencies for Column 11, Column 43

	1	2	3	Totals
2	1	1	0	2
3	1	3	0	4
4	5	49	1	55
5	0	7	1	8
Totals	7	60	2	69

Summary Table for Column 12, Column 44

Num. Missing	15
DF	6
Chi Square	7.677
Chi Square P-Value	.2628
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.318
Cramer's V	.238

Observed Frequencies for Column 12, Column 44

	1	2	3	Totals
2	0	1	1	2
3	2	4	1	7
4	5	39	4	48
5	0	9	2	11
Totals	7	53	8	68

Summary Table for Column 13, Column 45

Num. Missing	16
DF	6
Chi Square	11.032
Chi Square P-Value	.0874
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.376
Cramer's V	.287

Observed Frequencies for Column 13, Column 45

	1	2	3	Totals
1	0	1	0	1
3	3	5	1	9
4	2	31	6	39
5	0	16	2	18
Totals	5	53	9	67

Summary Table for Column 14, Column 46

Num. Missing	15
DF	6
Chi Square	20.380
Chi Square P-Value	.0024
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.480
Cramer's V	.387

Observed Frequencies for Column 14, Column 46

	1	2	3	Totals
2	1	0	0	1
3	0	3	1	4
4	3	41	1	45
5	1	17	0	18
Totals	5	61	2	68

Summary Table for Column 15, Column 47

Num. Missing	15
DF	6
Chi Square	9.217
Chi Square P-Value	.1617
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.345
Cramer's V	.260

Observed Frequencies for Column 15, Column 47

	1	2	3	Totals
2	2	1	0	3
3	1	3	0	4
4	5	25	10	40
5	2	12	7	21
Totals	10	41	17	68

Summary Table for Column 16, Column 48

Num. Missing	15
DF	6
Chi Square	8.124
Chi Square P-Value	.2292
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.327
Cramer's V	.244

Observed Frequencies for Column 16, Column 48

	1	2	3	Totals
2	0	2	0	2
3	3	5	1	9
4	4	34	5	43
5	0	11	3	14
Totals	7	52	9	68

Summary Table for Column 17, Column 49

Num. Missing	16
DF	6
Chi Square	11.985
Chi Square P-Value	.0623
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.390
Cramer's V	.299

Observed Frequencies for Column 17, Column 49

	1	2	3	Totals
2	1	0	0	1
3	1	6	2	9
4	6	26	8	40
5	0	10	7	17
Totals	8	42	17	67

Summary Table for Column 18, Column 50

Num. Missing	14
DF	6
Chi Square	15.306
Chi Square P-Value	.0180
G-Squared	13.723
G-Squared P-Value	.0329
Contingency Coef.	.426
Cramer's V	.333

Observed Frequencies for Column 18, Column 50

	1	2	3	Totals
2	5	1	1	7
3	2	4	2	8
4	6	27	3	36
5	2	12	4	18
Totals	15	44	10	69

Summary Table for Column 19, Column 51

Num. Missing	14
DF	6
Chi Square	9.409
Chi Square P-Value	.1519
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.346
Cramer's V	.261

Observed Frequencies for Column 19, Column 51

	1	2	3	Totals
2	1	3	0	4
3	3	3	4	10
4	4	30	5	39
5	2	10	4	16
Totals	10	46	13	69

Summary Table for Column 20, Column 52

Num. Missing	15
DF	8
Chi Square	15.529
Chi Square P-Value	.0496
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.431
Cramer's V	.338

Observed Frequencies for Column 20, Column 52

	1	2	3	Totals
1	1	0	0	1
2	2	0	0	2
3	2	6	3	11
4	7	31	5	43
5	1	8	2	11
Totals	13	45	10	68

Summary Table for Column 21, Column 53

Num. Missing	14
DF	8
Chi Square	10.705
Chi Square P-Value	.2190
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.366
Cramer's V	.279

Observed Frequencies for Column 21, Column 53

	1	2	3	Totals
1	1	0	0	1
2	4	1	0	5
3	4	10	1	15
4	11	28	1	40
5	1	7	0	8
Totals	21	46	2	69

Summary Table for Column 22, Column 54

Num. Missing	14
DF	8
Chi Square	18.845
Chi Square P-Value	.0157
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.463
Cramer's V	.370

Observed Frequencies for Column 22, Column 54

	1	2	3	Totals
1	0	1	0	1
2	5	2	1	8
3	11	6	3	20
4	9	21	1	31
5	0	9	0	9
Totals	25	39	5	69

Summary Table for Column 23, Column 55

Num. Missing	14
DF	8
Chi Square	13.564
Chi Square P-Value	.0939
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.405
Cramer's V	.314

Observed Frequencies for Column 23, Column 55

	1	2	3	Totals
1	1	2	0	3
2	4	1	0	5
3	12	6	3	21
4	13	18	3	34
5	0	6	0	6
Totals	30	33	6	69

Summary Table for Column 24, Column 56

Num. Missing	15
DF	6
Chi Square	35.565
Chi Square P-Value	<.0001
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.586
Cramer's V	.511

Observed Frequencies for Column 24, Column 56

	1	2	3	Totals
2	2	1	0	3
3	3	4	2	9
4	0	33	2	35
5	0	15	6	21
Totals	5	53	10	68

Summary Table for Column 25, Column 57

Num. Missing	16
DF	6
Chi Square	26.385
Chi Square P-Value	.0002
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.532
Cramer's V	.444

Observed Frequencies for Column 25, Column 57

	1	2	3	Totals
2	2	0	0	2
3	7	7	1	15
4	3	34	4	41
5	0	6	3	9
Totals	12	47	8	67

Summary Table for Column 26, Column 58

Num. Missing	16
DF	8
Chi Square	43.914
Chi Square P-Value	<.0001
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.629
Cramer's V	.572

Observed Frequencies for Column 26, Column 58

	1	2	3	Totals
1	0	0	1	1
2	4	0	0	4
3	3	1	3	7
4	4	38	3	45
5	0	8	2	10
Totals	11	47	9	67

Summary Table for Column 27, Column 59

Num. Missing	17
DF	6
Chi Square	12.391
Chi Square P-Value	.0538
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.398
Cramer's V	.306

Observed Frequencies for Column 27, Column 59

	1	2	3	Totals
2	2	3	1	6
3	3	4	1	8
4	4	36	5	45
5	0	4	3	7
Totals	9	47	10	66

Summary Table for Column 28, Column 60

Num. Missing	14
DF	6
Chi Square	25.160
Chi Square P-Value	.0003
G-Squared	•
G-Squared P-Value	•
Contingency Coef.	.517
Cramer's V	.427

Observed Frequencies for Column 28, Column 60

	1	2	3	Totals
2	4	1	0	5
3	1	7	0	8
4	2	39	3	44
5	2	8	2	12
Totals	9	55	5	69

Summary Table for Column 29, Column 61

Num. Missing	18
DF	6
Chi Square	18.941
Chi Square P-Value	.0043
G-Squared	.
G-Squared P-Value	.
Contingency Coef.	.475
Cramer's V	.382

Observed Frequencies for Column 29, Column 61

	1	2	3	Totals
2	1	0	0	1
3	4	5	0	9
4	3	36	4	43
5	0	11	1	12
Totals	8	52	5	65

Summary Table for Column 30, Column 62

Num. Missing	16
DF	6
Chi Square	12.715
Chi Square P-Value	.0478
G-Squared	.
G-Squared P-Value	.
Contingency Coef.	.399
Cramer's V	.308

Observed Frequencies for Column 30, Column 62

	1	2	3	Totals
2	2	1	0	3
3	4	7	2	13
4	3	37	3	43
5	1	6	1	8
Totals	10	51	6	67

Summary Table for Column 31, Column 63

Num. Missing	15
DF	8
Chi Square	35.268
Chi Square P-Value	<.0001
G-Squared	.
G-Squared P-Value	.
Contingency Coef.	.584
Cramer's V	.509

Observed Frequencies for Column 31, Column 63

	1	2	3	Totals
1	1	0	0	1
2	0	0	1	1
3	2	8	0	10
4	2	38	1	41
5	0	13	2	15
Totals	5	59	4	68

Summary Table for Column 32, Column 64

Num. Missing	23
DF	6
Chi Square	18.000
Chi Square P-Value	.0062
G-Squared	.
G-Squared P-Value	.
Contingency Coef.	.480
Cramer's V	.387

Observed Frequencies for Column 32, Column 64

	1	2	3	Totals
2	1	0	1	2
3	1	6	2	9
4	1	27	7	35
5	0	6	8	14
Totals	3	39	18	60